REMARKS

The new claims, which are patentable for the reasons below, are supported as follows (key words are in italic):

Claim 26:

Page 1, line 4: "A method of surface protection of a semiconductor substrate for maintaining a *clean surface* of a semiconductor substrate, in particular silicon semiconductor substrate in a condition in which it is not *contaminated with organic substances*"; also the Abstract, mentioning "*deposition* of contaminating substances";

Page 8, line 4: "(1) By employing high [molecular-weight] molecules, the coating condition can be safely *maintained.* The reason for this is that, in adsorption of organic substances, organic substances of low molecular weight are the first to be *adsorbed*, so by substituting these with high molecules, a superior coating condition can be produced.... if the surface is initially coated with a high molecular organic substance, the *probability of substitution by other substances is abruptly reduced* ..." (line 11);

Page 2, lines 24-27: "... by depositing *chemical protection* onto the surface ... depositing a high molecular ...";

Page 3, line 5: "the surface condition of the semiconductor substrate after a *clean surface* is obtained can be maintained in a convenient fashion without requiring enormous investment";

Page 2, line 4, "*a mini-environment or a method of organic substance removal*";

Page 3, line 10: "processing temperature of *subsequent steps*";

Pages 4/5: "deposited on the highly clean surface 2 as shown in (b) of Figure 1 *immediately* after the highly clean surface 2 of the semiconductor substrate 1 *has been generated, or during washing*"; also page 7, line 9 "immediately after";

Page 5, line 6: the "high molecular straight-chain organic compound 3 as referred to herein is a substance which does not easily evaporate from the surface even when the wafer is left to stand at *ordinary temperature*";

Page 5, lines 10-14 and 22 support removal by boiling; also page 9, line 25 to page 10, line 2;

Page 6, lines 5-7 support "greater than or equal to 233 °C" in claim 26.

Claim 27:

Page 8, line 22: "Preferably, if the high molecular straight-chain organic compound 3 is a compound containing the COOH group, the benefit of more *uniform* disposition onto the surface of the semiconductor substrate 1 can be expected." Also page 8, line 24 recites "more uniform"; uniformity is illustrated in Figs. 1(b) and 2 (cited at page 4, line 25) ; "uniformly deposited" is also at page 7, line 19 and page 8, line 17.

Claim 30:

The phrase "organic oxide" is at page 9, line 1.

Claim 31:

This claim is based on canceled claim 24.

Claim 32-33:

These claims follows logically from claim 26, which recites "or" and page 11, line 7 of the original specification.

Claim 34-40:

These claims are based on canceled claims 7-12 and 21, respectively.

§ 112. Claims were rejected for "leaving the substrate to stand in air ..." The new claims lack this recitation and are based entirely on the specification and/or the other claims not rejected. This rejection is believed to be moot. For the record, the Applicants' traversal is respectfully maintained for the reasons already stated.

§ 102. Claims 1-3, 6-9, 12, and 22-25 were rejected under §102 over JP07-275813. This rejection is respectfully traversed.

(1) New independent claim 26 recites a method of "abruptly reducing a probability of organic substances of low molecular weight adsorbing onto a surface of a semiconductor substrate" and no method of this type is disclosed by the reference. Because only low–molecular-weight substances are disclosed, the claimed method is impossible (the Examiner is referred to the specification at page 9, lines 9-13).

(2) Claim 21 recites putting a high-weight substance on the substrate surface, and none such is disclosed. JP '813 itself discloses what it calls "*low*-molecular weight" (emphasis added) polyorganosiloxane, in the Abstract at line 4 and elsewhere. The disclosed cleaning substances have "volatility" (end of ¶[0018]). In ¶[0014], JP '813 states that the low-molecular weight polyorganosiloxane is preferred for its 60 °C boiling point. This low temperature is believed to be related to its low molecular weight.

(3) The 60 °C boiling point mentioned above is far below the minimum boiling temperature of 233 °C that is now recited in independent claim 26. There is no anticipation of the claimed temperature range—a range that is directly related to the Applicants' result.

(4) There is no disclosure of depositing the polyorganosiloxane "immediately after the highly clean surface of the semiconductor substrate has been generated" (claim 33). The reference teaches application of polyorganosiloxane only by mixing the chemical with water, for a washing process. The applied paragraphs [0009]-[0013] of JP '813 repeatedly refer to washing, and polyorganosiloxane is not disclosed as being applied *after* washing, contrary to the Applicants' claim 33.

Paragraphs [44]-[47], which are also applied in the rejection, refer to a "desirable" "steamy cleaning agent" and to "steamy washing" in ¶[44]; and ¶[45] states that the boiling point needs to be higher than the substrate temperature "at the time of steamy washing;" however, since the disclosed polyorganosiloxane boils at 60 °C, any "steamy" treatment (which must be at around 100 °C) will certainly remove it and it will not remain on the surface.

Thus, in these paragraphs there is no disclosure of polyorganosiloxane being *left* on the surface after the steamy washing, contrary to the claims.

§ 103. Claims 4-5 and 10-11 were rejected under §103 over JP '813 in view of Shimizu. This rejection is respectfully traversed.

(1) As noted above, JP '813 discloses a low-molecular weight compound which boils off when exposed to steam. Shimizu discloses high molecular weights (such compounds have high boiling points), which are intended to "have an excellent stability for a long period of time ... even when used at a high temperature" (Abstract). JP '813, which is concerned with cleaning,

teaches removal of all compounds while Shimizu emphases that the compounds should remain. These references teach against one another, and there is no expectation of success.

(2) The Examiner asserts motivation based on selecting a material to "achieve its objective." Does "it" refer to one of the references, and if so, which (from grammar it appears to refer to the material itself)? What is the objective asserted by the rejection? No objective is seen in either reference which would motivate the asserted combination, and the Examiner does not explain

Shimizu discloses no washing steps and has no relevance to the objects of JP '813.

Conversely, JP '813 does not mention magnetic properties, and "a dispersion of magnetic particles coated with fatty acid" (Shimizu col. 2, line 36) would certainly be out of place in liquid used for cleaning.

With respect, there is no reason whatsoever why the person of ordinary skill would have combined these references. No one would clean a sink with ferrofluid from a loudspeaker or put detergent around the loudspeaker coil.

§ 103. Claims 19 and 21 were rejected under §103 over JP '813 in view of Shinozaki. This rejection is respectfully traversed. The fields of invention are seen to be disparate, teaching away from combination, and the asserted selection of suitable materials is respectfully traversed as being unsupported by either citation or reasoned argument.

Shinozaki is concerned with surface tension for generating flow, which causes a recording material to fly and be transferred onto a recording medium. With respect, this is not at all related to washing. The Examiner again invokes an unspecified objective without explaining what it is or how it would have motivated combination. There is no expectation of success, no cogent any motivation, and the references are from different areas.

Allowance is requested.